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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,263	06/19/2002	Patrick Johannes Blom	34434	1713

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EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/069,263	Applicant(s) BLOM ET AL.	
	Examiner Tamra L. Dicus	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02-17-04,06-02-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The IDS is acknowledged. Cancellation of claims 2, 13, and 17 are acknowledged. This action is considered responsive to the last non-final Office Action mailed 06/29/04.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 (amended), 3-12, 14-16, 18-19, and 21-22 (new) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,851,614 to Buck in view of USPN 5,891,552 to Lu et al.

Buck teaches a self-adhesive opaque dry transfer decal (encompasses transfer label and shaped object) comprising a transparent base sheet (14) of a transparent film (20) with a coating layer (22) (boundary layer of claims 3, 7, and 14) that functions to reduce the strength of UV rays penetrating the transparent film and fading of the underlying ink layers. The printed multiple ink layers 24 (image layer) are deposited on the base sheet (14). The opaque layer (26) comprised of white/metallic ink (pigmented layer) is over the image layer and adhesive layer (3) is over the opaque layer (26). See FIG. 2, column 3, lines 55-68, and col. 4, lines 1-10, and 45-68.

Buck does not include an aluminum powder ranging from 0.1 - 5 wt% (claims 1 and 6) or titanium dioxide (new claim 19) or calcium carbonate (new claim 21) of Markush group according to new claim 22. However, Lu teaches a printed plastic film for transfer and teaches

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adding aluminum pigments, titanium dioxide, and calcium carbonate to reflect light and aluminum silicates as additives (in about 5 to 70 weight % at col. 4, lines 53-57, which is included in applicant's range of 0.1 – 5wt%) used in an opacifying ink layer at col. 4, lines 19-60. It would have been obvious to one of ordinary skill in the art to modify the decal of Buck to include aluminum, titanium dioxide, and calcium carbonate in a pigmented layer within the desired range of applicant to reflect light, and provide a desired degree of translucency or opacity as taught by Lu at col. 4, lines 40-60.

Regarding claim 18, lowering the amounts of aluminum powder to 0 wt % - 1.5 wt%, is an obvious modification. It would have been obvious to one of ordinary skill in the art to modify the decal of Buck since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, it would have been obvious to one of ordinary skill in the art to decrease the Al wt. %, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. The amount of Aluminum powder effects the opacity degree.

Regarding claims 5, 10-12, and 16, Buck does not teach adding water based ink in a pigmented layer. However, ink is inclusive of “water-based” ink and is used for effecting image transfer. One of ordinary skill in the art would employ water-based ink as conventionally shown in transfers for effective image formation.

Buck does not teach the particle size of the aluminium powder in the opaque pigmented layer. However Lu teaches particle sizes of 1 to 10 microns, meeting the limitations of 5 to 50 microns of claims 4, 8-9, and 15. Hence, it would have been obvious to one of ordinary skill in

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the art to modify the decal of Buck to include aluminium particles in a size between 5 and 50 microns since Lu teaches suitable particle sizes fall in the range are especially suited for quality transfer media.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,851,614 to Buck in view of USPN 5,891,552 to Lu et al. and further in view of USPN 5,484,758 to Wald.

Buck in view of Lu is relied upon above. Neither Buck or Lu teach adding zinc oxide (new claim 20). Wald teaches employing calcium carbonate, aluminum, and zinc oxide in use with binders as opacifiers for thermally-sensitive record material for labels. See col. 1, lines 5-10, col. 5, lines 30-34, and col. 6, lines 1-3. It would have been obvious to one of ordinary skill in the art to have modified the combination of Buck and Lu to incorporate zinc oxide because Wald teaches zinc oxide is a functionally equivalent opacifier used in labels (col. 1, lines 5-10, col. 5, lines 53-34, and col. 6, lines 1-3 of Wald).

Response to Arguments

Applicant's arguments filed 06-02-04 have been fully considered but they are not persuasive. Applicant argues the amended claims define over the prior art as discussed in an interview if Applicant submitted a convincing declaration, which was not possible at the time of the interview because the declarant was in travel. The recently submitted declaration does not show any comparative data to show aluminum powder is not interchangeable with titanium dioxide, calcium carbonate and aluminum. Nothing within the arguments of Applicant or Declarant Blom show that when adding aluminum powder instead of the aforementioned opacifying agents, the result would be surprising and unexpected as the Applicant and Declarant contend. Rather Declarant and Inventor Blom in the comparative examples use 0.6 wt %

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aluminum powder in combination with TiO₂ in Example 2, but in Example 1 only use TiO₂ by itself. In view of the prior art of record, one would expect the opacity to be higher employing two opacifying agents rather than only one, thus such a result is not surprising or unexpected as alleged by Declarant. The Lu reference teaches both opacifying agents TiO₂ and aluminum may be used together in the same amount (about 5%), meeting the same range as Applicant (not more than 5 wt %). See col. 4, lines 44-55 of Lu. Thus the declaration is not convincing. Further, the specification of the instant application describes two pigments used as opacifiers include both titanium dioxide and calcium carbonate with the inclusion of aluminum powder. Thus because the specification uses the same opacifiers in combination with aluminum powder, it is not understood how the Applicant or Declarant can allege the aforementioned opacifying agents are not interchangeable with aluminum powder. See page 6, lines 1-5 of Applicant's specification. Also within the instant disclosure on page 2, line 25, the aluminum powder is included in an amount up to 5 wt%. Lu teaches adding all aforesaid opacifiers in an amount of about 5 wt%, which is included in "up to 5 wt%" or "not more than 5 wt%" as instantly recited.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

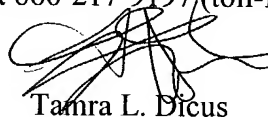
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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197/(toll-free).



Tamra L. Dicus
Examiner
Art Unit 1774

10/12/04



RENA DYE
SUPERVISORY PATENT EXAMINER 10/14/04
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